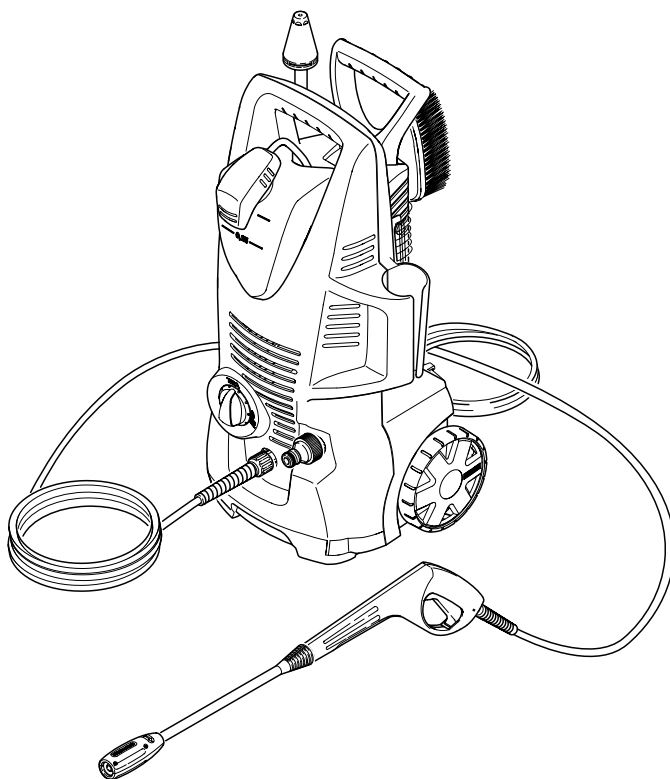


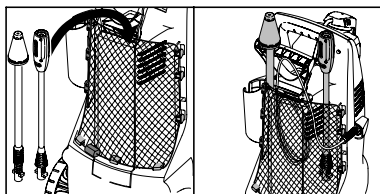
**KÄRCHER****K 2.91 M**

## Operating Instructions

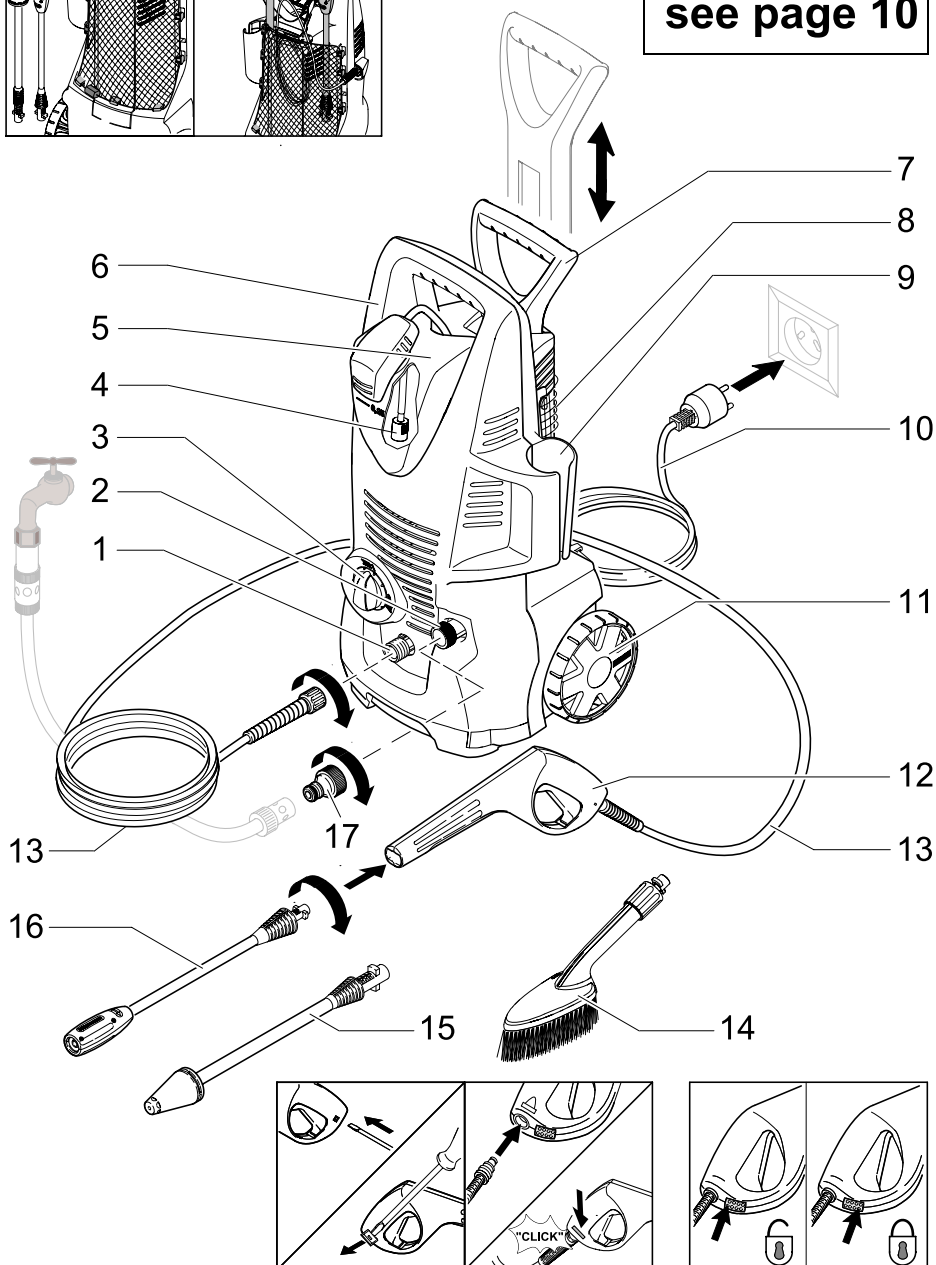
Before first use of the unit read these operating instructions and act in accordance with them.



5.961-917.0 (06/07)



**Assembly  
see page 10**



## Dear Customer,



Please read and comply with these instructions prior to the initial operation of your appliance. Retain these operating instructions for future reference or for subsequent possessors.

## Proper Use

This high-pressure cleaner is designed for domestic use only:

- to clean machines, vehicles, buildings, tools, facades, terraces, garden equipment etc. using a high-pressure water jet (and detergents if required).
- with accessories, replacement parts and detergents approved by Kärcher. Observe the instructions provided with these detergents.

## Environmental protection



The packaging material can be recycled. Please do not place the packaging into the ordinary refuse for disposal, but arrange for the proper recycling.



Old appliances contain valuable materials that can be recycled. Please arrange for the proper recycling of old appliances. Please dispose your old appliances using appropriate collection systems

## Warranty

The terms of the guarantee applicable in each country have been published by our respective national distributors. We will repair possible faults on your unit free of charge within the warranty period, insofar as the faults are caused by material defects or defective workmanship. Guarantee claims should be addressed to your dealer or the nearest authorized customer service centre, and supported by documentary evidence of purchase.

## Description of the Appliance

When unpacking the product, make sure that no accessories are missing and that none of the package contents have been damaged. If you detect any transport damages please contact your dealer.

### *Illustrations on Page 2*

- 1 High pressure outlet
- 2 Connection for water supply with filter
- 3 ON/OFF switch for appliance
- 4 Detergent suction hose with filter
- 5 Detergent tank
- 6 Carrying handle
- 7 Transport handle, adjustable height
- 8 Support for spray lance
- 9 Storage, trigger gun
- 10 Power cable with plug
- 11 Bearing wheel
- 12 Trigger gun with safety catch
- 13 High pressure hose
- 14 Washing brush
- 15 Spray lance with dirt blaster
- 16 Spray lance with pressure regulation (Vario Power)
- 17 Coupling element for water connection

## Safety instructions

### **Danger**

- Never touch the mains plug and the socket with wet hands.
- The appliance must not be used if the power cable or important parts of the appliance, e.g. safety devices, high-pressure hoses, spray guns, are damaged.
- The appliance may not be used in areas where a risk of explosion is present.
- If the appliance is used in hazardous areas (e.g. filling stations) the corresponding safety provisions must be observed.
- Check the power cord with mains plug for damage before every use. If the power cord is damaged, please arrange immediately for the exchange by an authorized customer service or a skilled electrician.
- High-pressure jets can be dangerous if improperly used. The jet must not be directed at persons, animals, live electrical equipment or at the appliance itself.
- The jet must not be directed at other persons or directed by the user at him/herself to clean clothing or footwear.
- Never use the appliance to clean objects containing hazardous substances (e.g. asbestos).
- Vehicle tyres or tyre valves are susceptible to damage from the high-pressure jet and may burst. The first indication of this is a discolouration of the tyre. Damaged vehicle tyres/tyre valves are highly dangerous. Ensure that a distance of at least 30 cm is observed when cleaning with the jet!
- Never draw in fluids containing solvents or undiluted acids and solvents! This includes petrol, paint thinner and heating oil. The spray mist thus generated is highly inflammable, explosive and poi-



sonous. Do not use acetone, undiluted acids and solvents as they are aggressive towards the materials from which the appliance is made.

### **Warning**

- Check the high-pressure hose for damage before every use. Please arrange for the immediate exchange of a damaged high-pressure hose.
- High-pressure hoses, fixtures and couplings are important for the safety of the appliance. Only use high-pressure hoses, fixtures and couplings recommended by the manufacturer.
- This appliance was designed to be used with detergents which are supplied or recommended by the manufacturer. The use of other detergents or chemicals may compromise the safety of the appliance.
- Unsuitable extension cables can be hazardous. Only use extension cables outdoors which have been approved for this purpose and labelled with a sufficient cable cross section:  
1 - 10 m: 1,5 mm<sup>2</sup>; 10 - 30 m: 2,5 mm<sup>2</sup>

### **Note**

- The appliance is not intended for use by young children or infirm persons without supervision.
- Young children should be supervised to ensure that they do not play with the appliance.
- The operator must use the appliance properly. When working with the appliance, he must consider the local conditions and pay due care and attention to other persons, in particular children, who are nearby.
- Observe a distance of at least 30 cm when using the jet to clean painted surfaces to avoid damaging paintwork.
- Cleaning operations which produce oily waste water, e.g. engine washes, underbody washes, may only be carried out using washing stations equipped with an oil separator.

- *Wear protective clothing and safety goggles to protect against back spray containing water or dirt.*
- *Never leave the appliance unattended when it is in operation.*
- *Make sure that the power cable or extension cables are not damaged by running over, pinching, dragging or similar. Protect the power cable from heat, oil, and sharp edges.*
- *The connection between the power cable and extension cable must not lie in water.*
- *All current-conducting parts in the working area must be protected against jet water.*
- *The appliance may only be connected to an electrical supply which has been installed in accordance with IEC 60364.*
- *The appliance may only be connected to alternating current. The voltage must correspond with the type plate on the appliance.*
- *The minimum fuse rating required at the socket outlet is 10 A (slow-blow).*
- *To avoid accidents due to electrical faults we recommend the use of sockets with a line-side current-limiting circuit breaker (max. 30 mA nominal tripping current).*
- *The plug and coupling of the extension cable used must be watertight.*
- *Always fully unroll electrical cables from the cable drum.*

## Safety Devices

Safety devices serve to protect the user and must not be rendered inoperational or their functions bypassed.

### Power switch

The switch prevents unintended starting of the appliance. Stop the appliance during breaks or after operation.

### Safety catch

The safety catch on the trigger gun prevents the appliance from being switched on unintentionally.

# Commissioning and operation

## Before Startup

- Assemble appliance as shown on page 10.

**Note:** When the appliance is delivered, the HP hose and handgun are not attached. Please mount these before using the appliance for the first time.

- Push out the safety clip in the trigger gun using e.g. a small screwdriver.
- Join HP hose and trigger gun together.
- Push clip in until it engages and check that it is securely fastened by pulling on the high pressure hose.

## Water supply

According to the applicable regulations, the appliance must never be used on the drinking water net without a system separator. Use a suitable system separator manufactured by Kärcher; or, as an alternative, a system separator as per EN 12729 Type BA.

### Water supply from mains

For connection values, see type plate/technical data.

Observe regulations of water supplier.

- Use a fibre-reinforced hose (not included) with a standard coupling:
  - Minimum diameter, 1/2 inches (13 mm)
  - Minimum length, 7.5 m.
- Screw the coupling unit (supplied) to the water connection on the appliance.
- Push the water supply hose onto the coupling unit, then connect it to the tap.

### **Caution**

Never operate the high-pressure cleaner when the tap is turned off as dry running will damage the HP pump.

If the water supply is not clean, the Kärcher water filter must be used (special accessory - order No. 4.730-059).



## Drawing in water from open reservoirs

When fitted with the appropriate accessories, this high-pressure cleaner can draw in surface water, e.g. from water butts or ponds (max. suction height 0.5 m).

- As the standard coupling system is not suitable for use in suction mode, the Kärcher suction hose with integrated filter should be used instead (special accessory, order no. 4.440-238) and suspended inside the water butt.
- Use the Kärcher water filter to protect the HP pump and accessories (special accessories, order no. 4.730-059). This filter removes dirt from incoming water.
- Appliance ventilation: Switch on the appliance without connection the HP hose and run it until the water discharging from the HP outlet is free of bubbles. Switch off appliance and reconnect HP hose.

## Start up

- Screw high pressure hose on to high pressure outlet on appliance.
- Push the appropriate spray lance on to the trigger gun and fasten it by turning it through 90°.
- Open tap.
- Plug in the main plug.
- Set main switch to "I/ON".
- Press safety catch on the trigger gun to release it and pull lever.

## High pressure operation

### **Risk of injury**

The trigger gun is subjected to a recoil force when the water jet is discharged. Make sure that you have a firm footing and are also holding the trigger gun and spray lance firmly.

## **Spray lance with pressure regulation (Vario Power)**

Carrying out the most common cleaning tasks. The work pressure can be regulated between "Min" and "Max".

- Release the lever on the hand-spray gun.
- Turn the spray lance to the desired position.

## **Spray lance with dirt blaster**

For strong contaminations.

### **Operation with detergent**

#### **Note**

*Detergent can only be added when the appliance is being operated in low pressure mode.*

*All washing brushes supplied by Kärcher are designed for use with detergents.*

- Use spray lance with pressure regulation (Vario Power).
- Turn the spray lance to "Mix" position - low pressure.

## **Detergent infeed from detergent tank**

- Fill the detergent tank with detergent tablet and water or detergent concentrate and water (Observe metering recommendations on the packaging label of the detergent.)
- During low pressure operation, detergent is automatically drawn in from the filled detergent tank.

## **Recommended Cleaning Method**

- 1 Spray a small dose of the detergent on the dry surface, and allow it to react (make sure the detergent does not dry up).
- 2 Wash off the loosened dirt using the high-pressure jet.

## **Detergents**

To ensure a trouble-free operation of the appliance and to match the individual cleaning task, we recommend our Kärcher detergent and maintenance agents. Please ask for our advice, or request information on the products.

### **Interrupting operation**

- Release the lever on the trigger gun.
- During breaks, use the safety catch to secure the trigger gun lever.
- During longer breaks (more than 5 minutes), also turn the appliance off using the ON/OFF switch.

### **Finish operation**

- If detergent has been added:  
Fill detergent tank with clear water, switch the appliance on for approximately one minute once the spray lance has been removed and rinse until water runs clear.
- Release the lever on the handgun.
- Switch the appliance switch to "0/OFF".
- Turn off tap.
- Press the lever on the handgun to release any remaining pressure in the system.
- Disconnect the appliance from the water supply.
- Detach spray lance from the handgun.
- Briefly switch the appliance on ("I/ON"), press the handgun lever until no further water is discharged (approx. 1 min).
- Switch the appliance switch to "0/OFF".
- Use the safety catch to secure the handgun lever.
- Pull out the mains plug.
- Store the power cord, the high pressure hose and the accessories on the appliance.

## Maintenance and care

### **Risk of electric shock**

*Always switch off the appliance and pull out the mains plug before care and maintenance work.*

### **Cleaning**

Prior to longer periods of storage, e.g. in the winter:

- ➔ Remove filter from suction hose for detergent and clean with running water.
- ➔ Pull out filter in water connection using flat-nose pliers and clean with running water.

### **Maintenance**

The appliance is maintenance-free.

### **Frost protection**

#### **Risk of frost**

*Protect the appliance and accessories against frost.*

The appliance and its accessories can get destroyed through frost if there are any water residues in them. To avoid damage to them:

- ➔ Store the appliance and the entire accessories in a frost-safe room.

### **Spare Parts**

Only use original Kärcher spare parts. You will find a list of spare parts at the end of this document.

## Troubleshooting

You can rectify minor faults yourself with the help of the following overview. If in doubt, please consult the authorized customer service.

### **Risk of electric shock**

*Always switch off the appliance and pull out the mains plug before care and maintenance work.*

### **Warning**

*Repair works may only be performed by the authorized customer service.*

### **Appliance does not start**

- ➔ Check whether the voltage indicated on the type plate corresponds to the voltage of the socket.
- ➔ Check the power cable for damage.

### **Pressure does not build up in the appliance**

- ➔ Check the setting at the spray lance.
- ➔ Evacuate air from the appliance: Switch on the appliance when the high pressure hose is not connected and allow it to run until the water which discharges from the high pressure outlet is free of bubbles. Then connect the high pressure hose again.
- ➔ Clean the filter in the water supply connection: This can be easily removed using flat-nose pliers.
- ➔ Check all supply lines to the high pressure pump for leaks or blockages.

### **Strong pressure fluctuations**

- ➔ Clean the high-pressure nozzle: Remove dirt and debris from the nozzle bore with a needle and rinse through with water towards the front.
- ➔ Check the volume of incoming water.

### **High pressure pump leaking**

- ➔ Slight leakage from the high pressure pump is normal. If the leakage increases contact the authorized customer service.



### ***No detergent infeed***

- ➔ Turn the spray lance to "Mix" position - low pressure.
- ➔ Clean the filter of the detergent suction hose.
- ➔ Check the detergent suction hose for kinks.

## **Special accessories**

Special accessories expand the possibilities of using your appliance. Please contact your Kärcher dealer for further information.

## **Customer Service**

### **Australia**

Kärcher Pty. Ltd.  
40 Koornang Road  
Scoresby, Victoria 3179

1800 675 714 (Free Call)  
[www.karcher.com.au](http://www.karcher.com.au)

## **Specifications**

### **Power connection**

Voltage	(1~50 Hz) 230-240 V
---------	---------------------

Connected load	1,4 kW
----------------	--------

Mains fuse (slow-blow)	10 A
------------------------	------

Protective class	I
------------------	---

Protection class	IPX5
------------------	------

### **Water connection**

Max. feed temperature	40 °C
-----------------------	-------

Min. feed volume	8 l/min
------------------	---------

Max. feed pressure	1,2 MPa
--------------------	---------

### **Performance data**

Working pressure	8 MPa
------------------	-------

Max. permissible pressure	10 MPa
---------------------------	--------

Water flow rate	5,5 l/min
-----------------	-----------

Detergent flow rate	0,4 l/min
---------------------	-----------

Recoil force of trigger gun	12 N
-----------------------------	------

Hand-arm vibration (ISO 5349)	0,8 m/s <sup>2</sup>
----------------------------------	----------------------

Sound pressure level L <sub>pA</sub> (EN60704-1)	72 dB(A)
---	----------

Sound power level L <sub>WA</sub> (2000/14/EG)	86 dB(A)
---	----------

### **Dimensions**

Length	284 mm
--------	--------

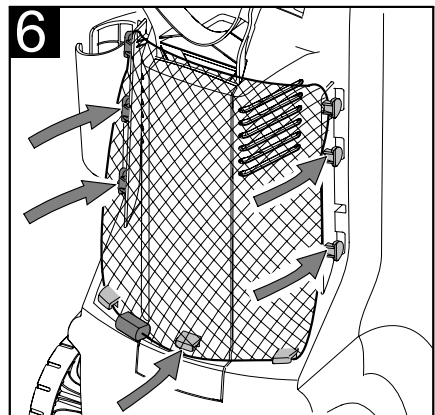
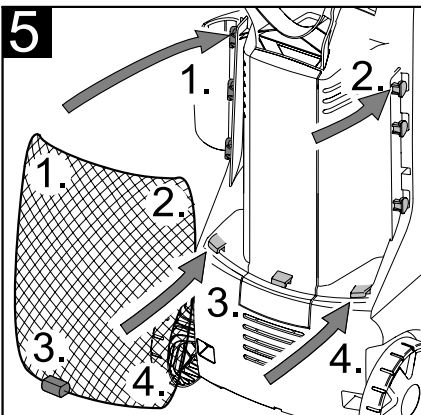
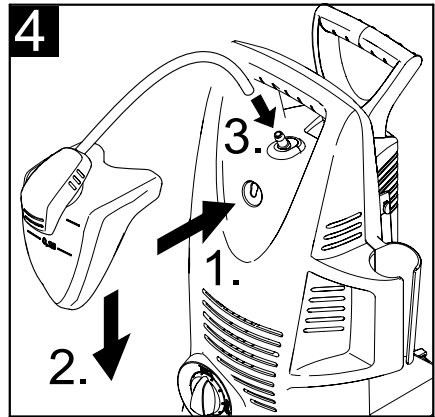
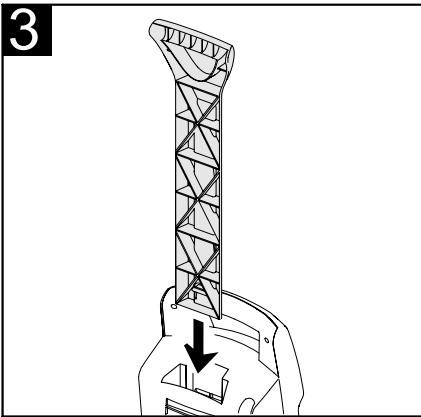
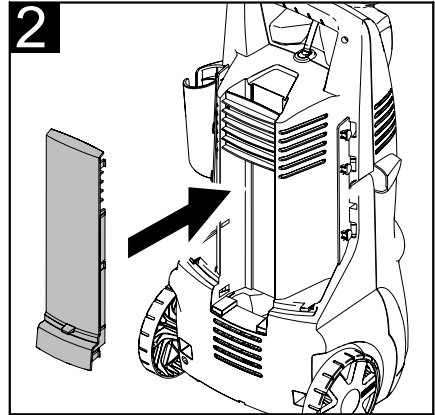
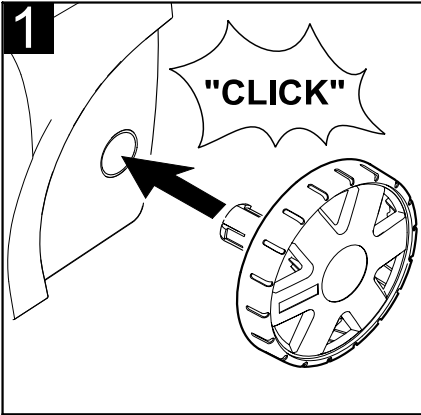
Width	294 mm
-------	--------

Height	566 mm
--------	--------

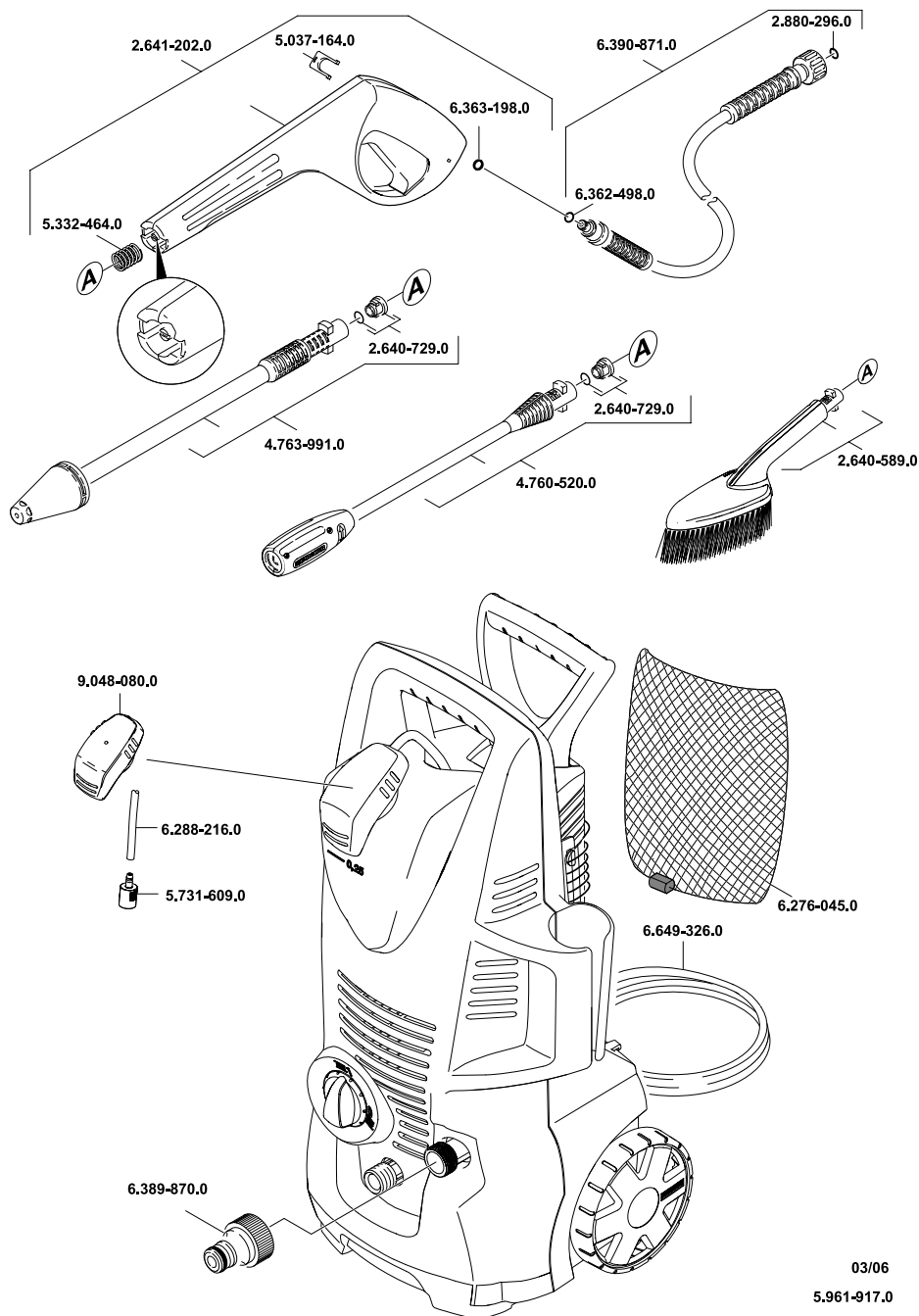
Weight	8,1 kg
--------	--------

***Subject to technical modifications!***

## Assembly



# Spare Parts



03/06

5.961-917.0



---

[www.kaercher.com](http://www.kaercher.com)